

## MIDI docs

# Trigger and Parameter Layers

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If you're new to the SEQ, you might be confused about trigger and parameter layers. What do they do? What's the difference? Hopefully this article will help you understand the concept.

Each track on the SEQ stores a bunch of information about how each step in the sequence stored in that track should be played back, like: What note should be played at this step? How loud? For how long? Any accents or glides? All of this information is stored in Trigger Layers and Parameter Layers.

Trigger and Parameter Layers store information that relates to each step, not to the track as a whole. Changing the Trigger or Parameter Layer setting for one step won't affect the other steps in the track.

## Trigger Layers

Trigger Layers store information that has only a binary on/off or yes/no value. Is there an accent on this step? Should this step be played or is it muted? Should this step be skipped? ...etc. In the SEQ's Edit View you can use the general purpose (GP) buttons to toggle the selected trigger layer on or off for each step, and the current value for each step is indicated by the LEDs above the GP buttons.

There are currently eight types of trigger layers:

- **Gate:** Controls whether a step should be played or not. If the Gate Trigger Layer is not assigned to any layer, all steps will be played.
- **Accent (Acc.):** If Accent is set to on, that step will be played at maximum velocity (127).
- **Roll:** If set to "on", the step will be triggered 3 times in quick succession. The same effect can be achieved with much more variation by setting the gatelength Parameter Layer to 2xdelay, 3xdelay or 4xdelay (delay is free definable in the gatelength Parameter Layer). The roll trigger is just an alternative, more convenient solution.
- **Glide:** Overlaps neighbouring notes. A synth which provides a "fingered portamento" or "SusKey" function will respond to the glide function
- **Skip:** Steps with skip set to "on" will be skipped. The sequencer will jump immediately from the previous step to the next step with a skip Trigger Layer set to "off".
- **Random Gate (R.G.):** The SEQ will decide randomly whether to play the note or not. This is especially useful for drum lines to increase the variation w/o creating multiple tracks. The same effect can be achieved with more control by using the Probability Parameter Layer. This is just a more quick and convenient way to accomplish the same thing.
- **Random Value (R.V.):** The step's note value (pitch) will be randomized.
- **NoFx:** the step won't be forwarded to Fx functions like Echo, Humanizer and Limiter. The step will play with no effects applied.

## Parameter Layers

Parameter Layers store types of information that have a range of values. What note should be played on this step? How loud should it be played? How long should it play for? ...etc. You can adjust Parameter Layer values in Edit View with the SEQ's 16 rotary encoders.

- **None:** The Parameter Layer has no function.
- **Note:** Controls the pitch of the note played when the step is played. In Edit View, you see the note name (C, C#, etc.) as well as a number representing the octave. There can be more than one Note Parameter Layer in a single track.
- **Chord:** When the step is played, a chord is generated instead of a single note. Chords are represented in Edit View by letters which correspond to chord types, not note names. See the [Official User Manual](#) and the MIDIdocs article on [chords](#) for more information.
- **Velocity:** Controls how loudly the note(s)/chord(s) at that step is/are played.
- **Length:** Controls the duration of the note(s)/chord(s) played at that step.
- **CC:** Sends a MIDI CC message with the selected value each time the step is played. Each CC Parameter Layer allows you to send values to only one CC number - select the CC number for the layer in the Event Menu Page. You can have multiple CC Parameter Layers in a single track, each one sending values on a different CC Number.
- **Pitch:** Sends a pitchwheel event with the selected value every time the step is played.
- **Probability (Prob):** The percentage chance that the step will be played. The SEQ uses this value to determine whether the step will be played or not each time the step is reached.
- **Delay:** Delays playing the step by the selected number of microticks.
- **Roll:** Plays the step 2 to 5 times with ascending or descending velocity. 127 variations are available. Great for drum patterns!
- **Roll2** Plays the step 2 to 5 times, as above, but instead of velocity, the delay between repeats can be directly controlled. See the "Track Event Configuration" section of the [Official User Manual](#) for more information on Roll Parameter Layers

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